

國立清華大學 106 學年第 2 學期課程大綱

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| 科號 | | 組別 | | 學分 | 2 | 人數限制 | 20 |
| 修課年級 | <input type="checkbox"/> 大學部 年級以上 <input checked="" type="checkbox"/> 碩士班一年級以上(含博士班) <input type="checkbox"/> 碩士班二年級以上(含博士班) | | | | | | |
| 上課時間 | T5T6 | | | 教室 | | | |
| 科目中文名稱 | | | | | | | |
| 科目英文名稱 | Neurogenetics | | | | | | |
| 任課教師 | 張慧雲 (Hui-Yun Chang, Ph.D.) | | | | | | |
| 擋修科目 | N/A | | | 擋修分數 | N/A | | |

※下列各欄由任課教師提供※

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| 一、課程說明 | <p>This course aims to assist graduate students to understand and acquire the knowledge of how our genetic materials make how we think, move, behave, and feel. We also build up our desire to understand the association of genes, mutants, behavioral traits and neurological diseases. We will also include some current papers, and learn about the diversity of society topics in neurogenetics.</p> |
| 二、指定用書 | <p>The instructor will prepare e-handouts for students. There is no assigned textbook. However, we encourage graduate students to become familiar not only with the contents of neurogenetics but also building up the long-term potentiation on how to apply the knowledge learned for graduate research, life and others.</p> |
| 三、參考書籍 | <ol style="list-style-type: none"> 1. Principles of Neural Science, by Eric Kandel, James H. Schwartz, and Thomas Jessell 2. Neurogenetics: A Guide for Clinicians by Nicholas Wood, 2012. 3. Neurosciences (4th edition) by Dale Purves, George J. Augustine, David Fitzpatrick, William C. Hall, Anthony-Samuel LaMantia, James O. McNamara, and Leonard E. White, 2008. 4. 撰寫及發表科學論文: Robert A. Day 原著. 丘志威・吳定峰・楊鈞雍・陳炳輝 編譯. 5. Online: neuron; nature; science; nature neuroscience ; Molecular Psychiatry; Journal of neuroscience; Journal of |

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| | neurogenetics ; brain research ; behavioral brain research, frontiers of neuroscience and many others |
| 四、教學方式 | Lecture + Graduate Student Presentation + Interactive Discussion and other works |
| 五、教學進度 | <p>Week 1 (3/6 T5&6): <i>Introduction</i> 張慧雲: Introduction of contents, assigned topics, guidance of presentation and report writing, grading, and many others.</p> <p>(I) Week 2 & 3 & 4 (3/13; 3/20; 3/27) : genes, nerve cells, brain function and animal behavior. History Introduction Genes make up CNS and PNS Brain and Behavior</p> <p>(II) Week 6 & 7 & 8 (4/3; 4/10; 4/17; 4/24): genes, brain and neurological disorders and neuropsychiatry diseases. : Genes, Motor and Emotion Nervous systems Nervous system of movement and emotion Neuropsychiatry diseases of emotion Neurological diseases of motor</p> <p>(III) Week 9 & 10 & 11 & 12 (5/8; 5/15; 5/22) Understanding of Cognition Catching up on Schizophrenia. Alzheimer's disease genetics: from the bench to the clinic.</p> <p>(VI) Week 13 & 14 & 15 (5/29; 6/5 final): Systems of cultures on the future in neurogenetics Nature and Nurture Culture and Music</p> |
| 六、成績考核 | 80% (examination, oral and/or written presentation) +20 % participation and discussion |
| 七、講義位址 http:// | |